

Appendix A: Anatomy of a Forecast

The National Weather Service issues forecasts for sky condition, temperature, wind, and precipitation probability on a routine basis. Because the weather is always changing, the terminology used in these forecasts is also quite variable. Listed below are descriptions of regularly used weather terms that should give you a better understanding of each forecast.

SKY CONDITION

The sky condition describes the predominant/average sky condition based on eighths of the sky covered by opaque (not transparent) clouds. If a high probability of precipitation (60% or greater) is expected, then the sky condition may be omitted since it is inferred from the precipitation forecast.

<i>Sky Condition</i>	<i>Opaque Cloud Coverage</i>
Cloudy	7/8 to 8/8
Mostly Cloudy / Considerable Cloudiness	5/8 to 7/8
Partly Cloudy / Partly Sunny	3/8 to 5/8
Mostly Clear / Mostly Sunny	1/8 to 3/8
Clear / Sunny	1/8 or less

TEMPERATURE

The temperature in a forecast is used to describe the forecast maximum and minimum temperature, or in some cases, the temperature expected at a specific time.

<i>Temperature Description</i>	<i>Forecast Meaning</i>
Around 40 / Near 40 / About 40	A range of temperatures from 38 to 42
Lower 40s	Temperatures of 40, 41, 42, 43, 44
Middle 40s	Temperatures of 43, 44, 45, 46, 47
Upper 40s	Temperatures of 46, 47, 48, 49
40s	A range of temperatures from 40 to 49
40 to 45	Temperatures of 40, 41, 42, 43, 44, 45

WIND

The wind describes the prevailing direction from which the wind is blowing, with speeds in miles per hour. Wind velocity is included in the first two periods of a zone forecast.

<i>Sustained Wind Speed</i>	<i>Descriptive Term</i>
0-5 mph	Light / Light & variable wind
5-10 mph / 10-15 mph / 10-20 mph	None
15-25 mph	Breezy (mild weather) Brisk or Blustery (cold weather)
20-30 mph	Windy
30-40 mph	Very windy
40 mph or greater	Strong, dangerous, high, damaging (High Wind Warning criteria)

PRECIPITATION PROBABILITY

The Probability of Precipitation (POP) is defined as *the likelihood of occurrence (expressed as a percent) of a **measurable** amount of liquid precipitation (or the water equivalent of frozen precipitation) during a specified period of time at **any given point** in the forecast area.* Measurable precipitation is equal to or greater than 0.01". Unless specified otherwise, the time period is normally 12 hours. The forecast area, or zone, is generally considered to be a county. NWS forecasters use such categorical terms as *occasional, intermittent, or periods of* to describe a precipitation event that has a high probability of occurrence (80% +) but is expected to be of an "on and off" nature.

<i>POP Percent</i>	<i>Expression of Uncertainty</i>	<i>Equivalent Areal Qualifier (convective only)</i>
10 percent	(None used)	Isolated / Few
20 percent	Slight chance	Widely scattered
30, 40, & 50 percent	Chance	Scattered
60 & 70 percent	Likely	Numerous (or none used)
80, 90, & 100 percent	(None used)	(None used)

TIME PERIODS

<i>Forecast Time Period</i>	<i>NWS Definition (LST)</i>
Today	6am-6pm
This Morning	6am-noon
This Afternoon	Noon-6pm
This Evening	6pm-midnight
Overnight	Midnight-6am
Tonight	6pm-6am

